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ABSTRACT

In multigrade instruction, children of at least a 2-year grade span and diverse ability levels are grouped in a single classroom and share experiences involving intellectual, academic, and social skills. "The Multigrade Classroom" is a seven-book series that provides an overview of current research on multigrade instruction, identifies key issues teachers face in a multigrade setting, and provides a set of resource guides for multigrade teachers. Book 7 discusses peer and cross-age tutoring and ways to develop a student tutoring program in the multigrade elementary classroom. In traditional single-grade classrooms, peer tutoring may occur on an incidental basis when one student seeks help from another. In the multigrade classroom, incidental tutoring is an encouraged and necessary instructional activity. Structured tutoring is even more effective than incidental tutoring. A research review outlines tutoring conditions producing the greatest success, what makes peer and cross-age tutoring effective, the benefits that student tutors derive from tutoring, common problems, and the elements necessary for a successful tutoring program. Teacher guidelines for developing a peer tutoring program focus on setting goals and learning objectives; criteria for choosing tutoring participants; the tutoring site; scheduling; deciding which subjects will be tutored; considerations related to materials, tutor training, tutoring approaches and strategies, monitoring and feedback, and tutor behavior and responsibilities; and evaluation of program success and tutoring effectiveness. (Contains 36 references and 7 resources.) (SV)

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A Resource for Small, Rural Schools

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Book 7: Planning and Using Peer Tutoring

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Northwest Regional Educational Laboratory

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THE MULTIGRADE CLASSROOM: A RESOURCE HANDBOOK FOR SMALL, RURAL SCHOOLS

Book 7: Planning and Using Peer Tutoring

November 1999

Rural Education Program

Based on the September 1989 publication
of the same title written by Bruce A. Miller

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Overview

Preface

The preface describes the process used in developing this handbook, including the multigrade teachers who shared their classroom strategies and ideas for improving the usefulness of the handbook.

Introduction

The history of multigrade classroom instruction is presented, along with the background information that describes why multigrade instruction is an important and complex issue for educators.

Book 1: Review of the Research on Multigrade Instruction

In this book, the research on multigrade instruction is reviewed in order to answer two questions: (1) What effect does multigrade instruction have on student performance? and (2) What kind of training is needed in order to teach in a multigrade classroom? Detailed information focusing on organizing and teaching in a multigrade classroom is also presented.

Book 2: Classroom Organization

This book describes strategies for arranging and organizing instructional resources and the physical environment of the classroom. Sample classroom layouts and a "design kit" for organizing your classroom are also included.

Book 3: Classroom Management and Discipline

Establishing clear expectations for student behavior and predictable classroom routines has been shown to improve student performance. In this book, research relating to classroom management and discipline are presented, along with a checklist for planning management routines and discipline procedures.

Book 4: Instructional Organization, Curriculum, and Evaluation

Research-based guidelines for planning, developing, and implementing instructional strategies are presented. This book emphasizes the development of cooperative work norms in the multigrade classroom and explains how to match instruction to the needs of students. An overview of curriculum and evaluation planning concepts is also provided. This book is a close companion piece with book 5: Instructional Delivery and Grouping.

Book 5: Instructional Delivery and Grouping

This book emphasizes that instructional quality and student grouping are key components for success in the multigrade classroom. Instructional methods such as recitation, discussion, and cooperative learning are reviewed. Planning guides and examples are also included where appropriate. Strategies for organizing group learning activities across and within grade levels, especially those that develop interdependence and cooperation among students, are discussed.

Book 6: Self-Directed Learning

Developing skills and strategies in students that allow for a high level of independence and efficiency in learning, either individually or in combination with other students, is essential in the multigrade classroom. Ideas for developing self-direction are presented in this book.

Book 7: Planning and Using Peer Tutoring

This book provides guidelines for developing skills and routines whereby students serve as "teachers" to other students within and across differing grade levels. The research on what makes for effective tutoring in the classroom is also reviewed.

Preface

The development of this handbook began in 1987, when a group of people involved in rural education raised several issues regarding multigrade classroom instruction.

In their discussions, members of the advisory committee for the Northwest Regional Educational Laboratory's (NWREL) Rural Education Program agreed that multigrade teacher training in their respective states was either lacking or wholly inadequate. They also were concerned about the availability of research and training materials to help rural multigrade teachers improve their skills.

As a result of these concerns, the Rural Education Program decided to develop a handbook to assist the multigrade teacher. The handbook evolved in several stages. The first was a comprehensive review, conducted by Dr. Bruce Miller, of the research on multigrade instruction that included articles, books, and research reports from the United States, Canada, Australia, and other countries.

From this review, six topic areas emerged that are considered essential for effective multigrade instruction: classroom organization; classroom management and discipline; instructional organization, curriculum, and evaluation; instructional delivery and grouping; self-directed learning; and planning and using peer tutoring. Dr. Miller developed the handbook around these six instructional areas, and a draft was completed in June 1989, with support from the Office of Educational Research and Improvement (OERI).

The second stage occurred in July 1989, when a conference was held in Ashland, Oregon, with multigrade teachers who were recommended by educational leaders from throughout the Northwest and Pacific Island regions.

During the conference, participants were organized into workgroups, each focusing on one of the topic areas. Their tasks were to review the appropriate handbook chapter for clarity and content, to suggest alternative and/or additional instructional strategies to those presented in the handbook, and to write case descriptions of activities drawn from their classrooms. For example, Joel Anderson from Onion Creek Elementary in Colville, Washington, described how he grouped students for cooperative learning. Darci Shane from Vida, Montana, presented a school handbook she had developed for parents that included a class schedule and other school-related information. (A full list of participants appears at the end of this preface.) The final handbook was completed by Dr. Miller in September 1989.

Based on the growing interest and research on multigrade instruction the handbook was revised and updated in 1999, also with support from OERI. The final version, completed with support from the Institute of International Education (IIE), is now composed of a series of seven stand-alone books.

Book 1: Review of the Research on Multigrade Instruction
Book 2: Classroom Organization
Book 3: Classroom Management and Discipline
Book 4: Instructional Organization, Curriculum, and Evaluation
Book 5: Instructional Delivery and Grouping
Book 6: Self-Directed Learning
Book 7: Planning and Using Peer Tutoring

Purpose and Scope of the Handbook

The handbook has been written to serve three general purposes:

- To provide an overview of current research on multigrade instruction
- To identify key issues teachers face when teaching in a multigrade setting
- To provide a set of resource guides to assist novice and experienced multigrade teachers in improving the quality of instruction

However, because of the complexity of multigrade instruction and the vast amount of research on effective classroom instruction, this handbook can only serve as a starting point for those educators wanting to learn new skills or refine those they already possess.

Each book of the series presents information, strategies, and resources considered important for the multigrade teacher. While all the books are related, they also can stand alone as separate documents. For example, the books on Classroom Organization (Book 2) and Classroom Management and Discipline (Book 3) contain overlapping information. Ideally, these two books are best utilized together. The same is true of the books on Instructional Organization, Curriculum, and Evaluation (Book 4) and Instructional Delivery and Grouping (Book 5). Wherever possible, these relationships have been noted in the appropriate books.

In conclusion, the series of books has been designed to be used as a research-based resource guide for the multigrade teacher. It covers the most important issues the multigrade teacher must address to be effective in meeting the needs of students. Sample schedules, classroom layouts, resource lists, and strategies aimed at improving instruction have been used throughout. It is our hope that the handbook will raise questions, provide answers, and direct the multigrade teacher to resources where answers to other questions can be found.

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Introduction

In contrast to a historical pattern of children developing within an age-varied social system, many children today spend a majority of their time in an age-segregated milieu (Katz, Evangelou, & Hartman, 1990; McClellan, 1994). The results of this pattern of segregation are thought to contribute to a declining social support system and compromised development of children's social and academic skills.

Coleman (1987) suggests the need for a significant institutional and societal response to support functions traditionally filled by the family, such as the development of feelings of belonging and community, emotional and social bonding, and nurturance. Increasingly, the school has been viewed as one of the most effective and efficient contexts to address children's academic, affective, and social needs before these needs reach crisis proportions.

A growing body of research explores the influence of educational contexts on children's development. While interest has focused on the impact of the classroom environment on children's attitudes toward school, cognitive growth, and academic development, less direct attention has been given to the relationship between classroom context (including the structure and content of children's peer relationships) and academic and social development during the elementary years. One approach explored by theoreticians and researchers for encouraging children's academic and social skill development is multigrade instruction.

In multigrade instruction, children of at least a two-year grade span and diverse ability levels are grouped in a single classroom and are encouraged to share experiences involving intellectual, academic, and social skills (Goodlad & Anderson, 1987; Katz et al., 1990; McClellan & Kinsey, 1996). Consistency over time in relationships among teachers, children, and parents is viewed as one of the most significant strengths of the multigrade approach because it encourages greater depth in children's social, academic, and intellectual development. The concept of the classroom as a "family" is encouraged, leading to expansion of the roles of nurturing and commitment on the part of both students and teacher (Feng, 1994; Hallion, 1994; Marshak, 1994).

The potential academic and social implications of the multigrade concept of education are strongly supported by extensive research demonstrating the importance of peers in children's academic and social development, and by studies of reciprocity theory, which demonstrate the positive effect on child academic and social behavior of sustained close relationships between children and caregivers (Kinsey, 1998; Maccoby, 1992).

The adequate implementation of a multigrade approach to education extends beyond simply mixing children of different grades together. A positive working model of a multigrade classroom allows for the development of academic and social skills as the teacher encourages cross-age interactions through tutoring and shared discovery. Social competence develops

for older children out of their roles as teachers and nurturers, and for younger children out of their opportunity to observe and model the behavior of their older classmates (Katz et al., 1990; Ridgway & Lawton, 1969).

The multigrade classroom has traditionally been an important and necessary organizational pattern of education in the United States, notes Miller (1993). Multigrade education dates back to the one-room schools that were the norm in this country until they were phased out in the early part of the 1900s (Cohen, 1989; Miller, 1993). From the mid-1960s through mid-1970s, a number of schools implemented open education, ungraded classrooms, and multigrade groupings. Although some schools continued to refine and develop the multigrade concept, many of these programs disappeared from public schools. With the beginning of the industrial revolution and large-scale urban growth, the ideal of mass public education took root and the practice of graded schools began in earnest.

The graded school system provided a means of organizing and classifying the increased number of urban students of the 1900s. Educators found it easier to manage students by organizing them into age divisions or grades. Other factors, such as the advent of the graded textbook, state-supported education, and the demand for trained teachers, further solidified graded school organization (Miller, 1993; Uphoff & Evans, 1993). Critics of the graded school were quick to emphasize this deficiency. The realization that children's uneven developmental patterns and differing rates of progress are ill-matched to the rigid grade-level system has resulted in a growing interest in and study of the potential benefits of multigrade education in recent years (Miller, 1996). This growing interest is due to a greater focus on the importance of the early years in efforts to restructure the educational system (Anderson, 1993; Cohen, 1989; Stone, S.J., 1995; Willis, 1991) and an awareness of the limitations of graded education.

The multigrade classroom is labor intensive and requires more planning, collaboration, and professional development than the conventional graded classroom (Cushman, 1993; Gaustad, 1992b; Miller, 1996). Sufficient planning time must be available to meet the needs of both teacher and students. Insufficient planning, staff development, materials, support, and assessment procedures will have an impact on the success of the multigrade program (Fox, 1997; Miller, 1996; Nye, 1993).

Despite these constraints, there are special advantages to multigrade classrooms. Flexible schedules can be implemented and unique programs developed to meet students' individual and group interests and needs. Combined classrooms also offer ample opportunity for students to become resourceful and independent learners. The multigrade rural classroom is usually less formal than the single-grade urban or suburban classroom. Because of the small class size, friendly relationships based on understanding and respect develop naturally between the students and the teacher. In

this setting, students become well-known by their teacher and a family atmosphere often develops.

However, many teachers, administrators, and parents continue to wonder whether multigrade organization has negative effects on student performance. For most rural educators, multigrade instruction is not an experiment or a new educational trend, but a forceful reality based on economic and geographic necessity. In a society where educational environments are dominated by graded organization, the decision to combine grades is often quite difficult. The Rural Education Program of the Northwest Regional Educational Laboratory receives numerous requests from rural educators with two overriding concerns regarding multigrade classrooms:

- What effect does multigrade instruction have on student performance?
- What kind of preparation or training is needed to be an effective teacher in a multigrade classroom?

This handbook will provide answers to these questions and develop an overview of key issues facing school districts and teachers involved in or contemplating multigrade classrooms.

Contents

What Is Peer Tutoring? 1
- Incidental Peer Tutoring 1
- Structured Tutoring 3

What Tutoring Conditions Produce the Greatest Success? 4

What Makes Peer and Cross-Age Tutoring Effective? 5

How Do Student Tutors Benefit From Tutoring 6

What Problems Are Commonly Encountered? 7

What Elements Are Necessary for a Successful Program? 8

Developing a Peer Tutoring Program in Your Classroom 9
- Setting Goals and Choosing Learning Objectives 9
- Deciding Who Will Be Involved in Tutoring 10
- Deciding Where Tutoring Will Take Place 12
- Scheduling the Tutoring Sessions 12
- Deciding What Subjects Will Be Tutored 13
- Deciding on Tutoring Materials, Procedures, and Strategies 14
  - Materials 14
  - Tutor training (Keep it brief) 14
  - Tutoring approaches and strategies 15
  - Monitoring/feedback 15
- Evaluation 17

Conclusion 18

References 19

Resources 22

What Is Peer Tutoring?

Outside of school, children learn from one another as a natural occurrence in daily life. A child having difficulty baiting a fishhook, building a birdhouse, baking a cake, or understanding model airplane directions will often rely on a brother, sister, or friend for instruction, which usually involves both demonstration and explanation. In such situations, peer tutoring is taking place.

Peer tutoring is cooperation between two or more students, where one individual imparts knowledge to the other(s). This can occur between students of the same age or grade (same-age tutoring) or between students of different ages or grades (cross-age tutoring). For example, when one student helps another student to learn math facts, we can say peer tutoring has taken place. This may be a sixth-grade student helping a first-grader or two first-graders tutoring each other.

In the traditional single-grade classroom, peer tutoring may occur on an incidental basis as when one student seeks help with a math problem from his or her neighbor. In the multigrade classroom, this incidental tutoring is an encouraged and necessary instructional activity. Research evidence specifically focusing on incidental tutoring in multigrade classrooms is nonexistent. However, research on structured tutoring programs is abundant and overwhelmingly positive. Therefore, greater emphasis will be placed on structured tutoring. In addition, information collected from interviews and discussions with multigrade teachers supports the belief that underlying successful incidental tutoring are principles of effective instructional practice. This book of the multigrade series will describe both incidental and structured approaches to tutoring, paying special attention to those characteristics deemed successful by teachers and researchers.

Incidental Peer Tutoring

In the multigrade classroom, peer tutoring provides the teacher with a powerful strategy for extending the teacher's instructional influence. When teaching two or more different grades in a single classroom, especially when class size pushes above 15 students, the teacher may have difficulty directly responding to individual student needs. Multigrade teachers reporting on their experiences with peer tutoring indicated a strong dependence on students helping one another (Ashland Multigrade Conference in 1989). In nearly all reports, teachers indicated peer tutoring occurred on an incidental basis. That is, tutoring was not generally a systematically planned activity. As Carol Spackman, who teaches grades 4–8 in rural Utah, points out, "Peer tutoring at [my school] is usually spontaneous." Spackman describes several examples:

- [Jerry] is a very low achiever. His interest span is very low and he completes very little work without help from someone. [Sarah] finishes her work quickly so I ask her to let [Jerry] read to her for 10 minutes a day.
- [I also have students] work out problems together. (How do we do this math problem?)
- Have two students sit side by side with a newspaper and circle prepositions. The first [student] will circle three and then have the other [student] circle three. Each student watches closely to make sure the learner is correct.

The four teachers at the Ashland Multigrade Conference in Oregon who participated in the peer tutoring workgroup developed a set of case examples of how they used peer tutoring in their classrooms. A fictitious student named Joe is followed through a day in his multigrade school:

English is Joe's first subject of the day. The class has been assigned to learn the definition of a noun and write 10 examples. Joe confuses nouns and verbs, so Amy has been assigned to go outside with Joe and gather 10 things that are nouns. She is to demonstrate, for example, why he cannot pick up a "jump" or a "run," but that rocks and sticks are objects, and therefore, nouns.

Next is math. Joe is struggling with simple addition. He and Bob are going to a quiet corner with a container of bottle caps. Using these concrete objects, Bob will demonstrate simple addition to Joe, then assist Joe in working his own problems.

The next opportunity for peer tutoring for Joe is P.E., but with the roles reversed. A young student is having difficulty doing proper pushups, an exercise Joe is very good at. Joe is asked to demonstrate a proper pushup, then offer tips in helping the younger student. Joe's self-esteem is really boosted by being the "teacher," and he takes his task very seriously.

During spelling the class is divided into pairs for an individualized spelling program. Joe quizzes his partner on his word list. The words are checked for spelling errors, then the roles are reversed.

These multigrade teachers indicated that peer tutoring need "not be planned in the sense of being written in the plan book, but is part of a good teacher's mental arsenal of methods to help students." It is worth noting that these teachers each had several years of experience in the multigrade classroom. As successful multigrade teachers, they learned through experience to capitalize on the capabilities of their students to help one another. Seven different uses of peer tutoring in their classrooms were identified:

1. Drill each other--spelling, math, and so forth.
2. Help other students develop a skill that the tutor possesses
3. Build self-esteem of the tutor
4. Peer modeling of skills—pushups, songs, dancing, and so forth.
5. Ask a student to explain a concept in "kid language"
6. Let a student (or students) teach a chapter in social studies
7. Help each other with study skills and researching

In addition, the teachers identified a set of instructions that would be helpful for the tutor to follow:

- Smile.
- Be friendly.
- Speak clearly.
- Keep your voice to a whisper or whatever volume is appropriate.
- Answer in a positive way. If the child makes a mistake, don't say things like, "wrong" or "no, that isn't right" or "dummy." Instead say, "That's almost correct. Now listen while I repeat the word, and then you repeat it after me."
- Acknowledge correct work with a "that's right," "good job," or some other positive statement or positive gesture.

Structured Tutoring

Although the incidental tutoring described by the multigrade conference participants was described as "spontaneous" and "not something placed in the teacher's lesson plan book," it still has an element of structure. But the structure is based on years of classroom experience, where the teacher operates from a "good teacher's mental arsenal of methods to help students." In other words, these teachers are able to match the needs of different students and apply an appropriate tutoring strategy in a spontaneous manner. However, when novice teachers enter the multigrade classroom, they generally do not have the advantage of years of experience. For these teachers, research-based guidelines for tutoring may prove to be valuable.

What Tutoring Conditions Produce the Greatest Success?

Several features of peer tutoring have the greatest effect on student achievement and attitude.

1. Structured tutoring is more effective than tutoring on an incidental basis.
2. Tutoring of shorter (zero to four weeks) duration appears to produce the best results. When tutoring continues past four weeks, there is a diminishing return.
3. Tutoring where lower level skills are taught and tested produces the best student outcomes.
4. Greater results occur in math, followed by reading, than in other subject areas.

In using these results, remember that these conditions should not be viewed too narrowly or as absolutely necessary for successful peer tutoring. A large body of research on tutoring suggests that any organized and focused tutoring program will likely have a positive impact on student learning (see research reviews by Bartz & Miller, 1991; Cohen, Kulik, & Kulik, 1982; Gaustad, 1993). The type of tutoring program used should always be closely monitored to determine if desired changes in the learner are occurring and, if not, the likely causes. Because rural multigrade classrooms are often more informal than single-grade classrooms, tutoring activities may be implemented in a less structured, more spontaneous way.

What Makes Peer and Cross-Age Tutoring Effective?

Children have certain advantages over adults in teaching peers. They may more easily understand tutees' problems because they are cognitively closer. Allen and Feldman found that third- and sixth-graders were more accurate than experienced teachers in determining from nonverbal behavior whether agemates understood lessons (cited in Cazden, 1986; Gartner & Riessman, 1993; Hedin, 1987). The fact that their "cognitive framework" is similar may also help peer tutors present subject matter in terms their tutees understand.

Peer tutors can effectively model study skills such as concentrating on the material, organizing work habits, and asking questions. Cohen notes that similarity between model and learner increases the influence of modeling. An at-risk child may more easily identify with a student relatively close in age, particularly one of the same ethnic or social background, than with an adult. Higher status also promotes the effect of modeling. Cross-age tutoring takes advantage of the higher status inherent in the age difference while still retaining considerable similarity.

Tutors who have struggled academically may be more patient and understanding than those who haven't. Empathy contributes greatly to low achievers' effectiveness as cross-age tutors. Tutors often "pick up on things teachers weren't able to" because they experienced similar problems a few years earlier (Giesecke, Cartledge, & Gardner, 1993).

How Do Student Tutors Benefit From Tutoring?

1. Tutors benefit academically from the time spent reviewing and practicing material with their tutees. Tutors may also experience higher cognitive gains. Organizing material to teach "facilitates long-term retention, as well as aiding in the formation of a more comprehensive and integrated understanding" (Cohen, 1986). Tutoring also provides opportunities to practice and improve communication skills and work habits.

2. Tutors' self-esteem rises as they see their tutees improve. Knowing they are making a meaningful contribution is a powerful experience. Many tutors stop skipping classes and behaving disruptively after they realize they are role models for their tutees (Gaustad, 1992a).

What Problems Are Commonly Encountered?

Simply putting two students together won't result in successful tutoring. Untrained tutors, whether adults or students, may resort to threats of punishment and scornful put-downs. Tutors need training to master effective tutorial and communication skills.

Another potential problem is that student tutors may not completely understand the material to be taught. Cohen suggests assessing potential tutors' comprehension before assigning them to tutor. However, a tutor need not be an excellent student, especially in the case of cross-age tutoring. "A sixth-grader operating at a fourth-grade level can be an excellent helper of a second-grader who is also operating below grade level," Foot, Shute, Morgan, and Barron (1990) point out.

1. One drawback of peer tutoring is that tutees, often labeled as less capable than tutors, tend to resist being tutored by agemates.

2. Scheduling is a challenge with cross-age tutoring because it requires coordinating the schedules of two sets of students. Offering tutoring as a credit class gives tutors a predictable block of time. However, one period may not provide enough time if tutors and tutees attend schools some distance apart. Cardenas, Harris, del Refugio Robledo, and Supik (1991) found that many schools were unwilling to cope with the logistical problems of cross-age tutoring, despite its effectiveness. He designed the self-contained Companion Reading Program in response to this problem.

What Elements Are Necessary for a Successful Program?

The design of a tutoring program is dictated by its objectives, including the targeted age group and subject area, and by the availability of human, physical, and financial resources.

Establishing specific, measurable objectives permits assessment of individual progress and evaluation of the program's success as a whole. Frequent assessment of student progress gives program staff feedback on the effectiveness of lessons and encourages both tutor and tutee (Jenkins & Jenkins, 1987).

Procedures must be established for selecting and matching tutors and tutees. Examples of tutee selection criteria include test scores and teacher judgment. Tutors may be screened for desired attitudes or levels of academic competence. The Valued Youth Program, which recruits students who meet state at-risk criteria, accepts those with records of minor disciplinary problems but draws the line at criminal behavior.

Tutors also may be given basic training to accompany carefully structured materials, as in the Companion Reading Program, or extensive training that enables them to make more independent decisions. Extensive training is desirable when tutor progress is the main objective.

Tutors need ongoing supervision and support. Younger tutors will require more structure and closer supervision. In periodic group meetings, older tutors gain psychological support by talking about frustrations and sharing success stories. Tutors can learn from each other's experiences as well as from staff suggestions for handling problems.

Support by teachers and administrators is essential for a tutoring program to succeed in the long run. Foot, et al., (1990) list typical problems and concerns and recommend openly discussing them beforehand. Parents and the community should also be informed. Teachers who understand and believe in a program's potential to help their children will generally be firm supporters.

Decades of research have established that well-planned peer tutoring programs can improve student achievement and self-esteem as well as overall school climate. The wide variety of programs available should enable every interested school district to find a format that suits its needs.

Developing a Peer Tutoring Program in Your Classroom

Before a tutoring program is implemented, six important question areas need to be reviewed and answered. Without some idea of where you want to go and how you plan to get there, your chances of ever arriving are slim. The following questions will serve as a planning guide. You will also find a checklist consisting of questions and statements that will be helpful in thinking about what you should do. The checklist is divided into sections that focus on selecting students, deciding where tutoring will take place, scheduling, choosing materials and strategies, and evaluation.

Setting Goals and Choosing Learning Objectives

It is important that you specify the goals of your tutoring effort. What do you want to happen as a result of tutoring? Do you want to improve student performance in math or reading? Do you want to develop student self-direction and responsibility? Do you want to improve tutor self-esteem? Do you simply want to better manage the many different age levels of your multigrade classroom? Successful peer tutoring may have positive effects on many different areas at the same time, but the important thing is to be clear on your primary purpose for using tutoring. Begin planning your tutoring program by writing down a few goals you would like to achieve. To help you write your own tutoring goals, several examples follow:

- Peer tutoring will be used in my classroom to increase achievement and on-task time in math for first- and second-graders
- Peer tutoring will be used during oral reading to increase student fluency and motivation
- Peer tutoring will be used to help students perform better on spelling quizzes

Notice that each goal consists of two common elements: (1) who will receive the tutoring (first-and second-graders, all reading students, those performing poorly), and (2) what the tutoring will focus on (math achievement, on-task time, reading fluency, motivation, and poor spelling performance). In deciding your goals, be sure to include these two elements.

Equally important is establishing specific objectives (learner outcomes) for each tutoring pair or group that can be easily assessed. The following example illustrates how to establish a goal and an objective for tutoring:

Mrs. M decided to start a tutoring program to help Michael because he was performing poorly in division. Michael understood how to complete the problems, but his accuracy was worse and speed was much slower than other students. Mrs. M determined that Michael did not know basic multiplication facts. He continually used his fingers. Mrs. M decided to use Bill as a tutor. He got along well with other students and could be counted on to follow through on activities or tasks he started. Mrs. M described what Michael needed to learn.

Michael's learning objective

Michael will learn his times tables through the 4's so that he can finish a mixed-facts worksheet in two minutes without missing more than five problems.

Mrs. M wrote the learning objective so that it could be easily understood by Bill and Michael. Note that the objective has several important elements:

1. It is based on the student's classroom learning needs.
2. It is clear and easy for both the tutor and learner to understand.
3. It is easy to measure.

Remember, in developing plans, be sure you know why you want to use peer tutoring (tutoring goals) and what specific objective (learner outcome) tutoring pairs or groups will work on.

Deciding Who Will Be Involved in Tutoring

The selection and matching of tutor and learner is an important task. Topping (1988) identifies 10 crucial areas when considering who should participate in tutoring. These areas will help guide you in making decisions regarding student participation. Each area is designed to be used for both the tutor and the learner.

1. How will students be selected?
   - Will you ask students or other teachers?
   - Will you observe the students?
2. What level of students will be tutored?
   - Will you select same-grade/-age tutors, cross-age tutors, or both?
   - What are the advantages and disadvantages of either approach?

3. What kind of academic skills will the tutor have?
    - Will you select tutors with higher-than-average scholastic ability?
    - Will you select students with below-average ability in order to help them develop their skills?
    - Will you select students with the same scholastic ability?
4. Have you thought about student relationships?
    - How will you deal with existing positive or negative relationships among students?
    - How will you deal with weak and strong personalities?
5. Have you considered the number of students to be tutored?
    - Will you begin with tutor-learner pairs or small groups?
    - How large will the groups be?
    - How many tutors can you effectively monitor?
6. Have you considered student characteristics?
    - How independent and responsible is the student?
    - What are student work habits like?
    - How cooperative is the student?
    - Does the student get along well with others?
7. How much consideration do you want to give to student preferences?
    - How much will students have to say about who they work with?
    - Will you have male-female pairs or only pairs of the same sex?
    - Will you mix pairings by culture or race? (Your knowledge of student working relationships and cultural backgrounds will be helpful.)
8. How will you handle tutor absenteeism?
    - Will you have standby tutors to fill in when one of the regular tutors is absent or quits?
    - How many standbys will you have?
    - Will you need to inform parents?
    - How much information do parents in your community need regarding your tutorial program?
    - How will you get information to parents if it is needed?

10 Do you feel tutors will need special incentives?

- Do you feel it is necessary to reward tutors?
- Should the rewards be extrinsic (e.g., verbal praise, stickers, privileges)?
- Should the rewards be intrinsic (e.g., personal satisfaction)?

Deciding Where Tutoring Will Take Place

In organizing your classroom for tutoring, you need to consider what else will be going on during tutoring. If you choose to have tutoring occur in pairs during reading time, then the entire room might become a tutoring zone. However, if you have students of several ages in your room at once and you want older students to tutor younger students in math, you may need to designate a special area for tutoring. This may be either in the classroom or outside, depending on available space. Whatever plan you choose, you should have your expectations for behavior clearly understood and tutoring areas well defined.

Scheduling the Tutoring Sessions

- Will tutoring occur during class time?
- During breaks or recess? After school?
- For what time periods will tutors work?
- Will it be the same time each day, or will the times vary with student need?

Deciding What Subjects Will Be Tutored

Reading

Oral reading, word recognition, decoding, and comprehension?

Math

Tutor drill activities such as basic facts, or work in conceptual areas such as computation or problem solving?

Language

Tutor in expressive areas such as creative writing and reporting, or emphasize grammar and mechanics?

Spelling

Will students drill in words or in spelling rules?

Which curriculum area you choose will be guided by your knowledge of student needs, available materials and, ultimately, the success of the tutor. Generally, there are two possible directions you may choose.

First, you may choose to focus on an academic content area such as math, where the tutor helps a student learn basic addition facts or assists the teacher in reinforcing how to add numbers. Or you may choose to focus on open-ended learning, where the tutor provides help to younger students who may need a combination of supervision and tutoring in order to complete an activity.

For example, if the teacher asks the primary grades to complete a series of plant activities in science that include planting a seed, collecting and labeling leaves, and making a plant scrapbook, older students might help the primary children in completing these tasks. The difference between academic content and open-ended learning centers on the openness of the tasks. In the first case there are clearly right and wrong answers, while in the second case the end results may be quite different for each student. In addition, open-ended learning places greater emphasis on supervision and support than does a focus on convergent academic tasks (i.e., where there is only one correct answer).

Remember, whatever curricular area you choose will be determined by what you want to accomplish in tutoring and the needs of students.

Deciding on Tutoring Materials, Procedures, and Strategies

When deciding how tutoring will take place, several key areas need to be addressed: materials, tutoring strategies, tutor training, monitoring/feedback, and evaluation. Using a list adapted from Topping (1988), each of these areas is outlined below:

Materials	1. Structure	• Will materials be highly structured and sequenced or open-ended?
		• Who will prepare structured materials, or can existing materials be used?
	2. Difficulty	• Will level of difficulty be controlled by materials?
		• Will the skill level of the tutor limit difficulty?
	3. Choice	• Will the tutor and learner have choices in the materials used?
		• Will they have a choice in how the materials will be used?
		• Will the teacher decide on both materials and strategies?
	4. Sources	• What materials are available and where can they be obtained?
		• Will materials have to be teacher-made?
		• Will tutors be allowed to make their own materials?
	5. Storage	• Where will materials be stored?
		• Who will have access to them: Tutor? Learner?
	6. Progression	• Who will determine when the learner should progress to the next activity, materials, or skill?
Tutor training (Keep it brief)	1. Expectations	• Will you model or role play how to tutor?
		• How will you convey the importance of being positive and supportive in the tutoring relationship?
		• How will you make your expectations for behavior clear?
		• Will tutoring procedures (schedules, using materials, etc.) be in writing?

	• How often will you meet to work with tutors and provide feedback on their performance?	
1. Packaged approach	• Will tutoring strategies be specified by the choice of materials or organization, such as SRA Instructional Kits, DISTAR Direct Instruction, cooperative learning, reading text, or workbooks?	**Tutoring approaches and strategies**
2. Drill and practice	• Will you emphasize the importance of varying activities in order to increase learner motivation?	
3. Correction procedures	• Will correction procedures be clear and simple? The tutor needs to either know the correct answers or where they may be found (e.g., answer sheets provided by the teacher).	
	• Will tutors be shown how to correct verbal responses?	
4. Praise	• How will tutors know how often to give praise and what to say ("ok," "good," "you're doing great," etc.)?	
	• Will tutors be shown how to give both verbal and nonverbal praise in a genuine manner?	
	• Will tutors know how to avoid criticism and sarcasm, either in tone of voice or in words?	
5. Social	• Will tutors understand how to establish rapport by relationship, sharing interests, demonstrating concern, and so forth?	
1. Methods	• Will you hold group discussions with the tutors? Learners?	**Monitoring/feedback**
	• Will you directly observe the tutor-learner process (most revealing method)? What will you look for if you observe?	
	• Who else might observe and give you feedback?	
2. The process	• Are the tutoring sessions occurring on schedule?	
	• Are the materials being used appropriately?	
	• Are the tutor and the learner working well together, without friction?	

3. Tutoring

- Was the tutor prepared for the lesson?
- Were materials ready?
- Did the tutor understand what was being taught?
- Did the tutor give clear directions?
- Did the tutor use negative reinforcement?
- Did the tutor use frequent positive reinforcement?
- Did the tutor actively involve the learner in the lesson?
- Was the tutor enthusiastic?
- Did the tutor keep the learner on task?
- Did the learner appear interested in the lesson?
- Did the learner complete the lesson?

4. The tutor

- Will tutors be responsible for keeping track of the learner's progress?
- If so, how will this be done (chart, workbook, graph, etc.)?
- Will the tutor be responsible to report progress to the teacher?
- If so, how often and in what form?

Evaluation

Evaluation is an essential part of tutoring. How will you know if you have achieved your goals unless you have some form of assessment? Your evaluation should reflect your program goals. If you said you wanted to use peer tutoring to increase student fluency and motivation in reading, how would you know if this goal had been achieved? Do students who received tutoring read more fluently now than when they began tutoring? Do they act more motivated by checking out more books, volunteering to read during oral reading activities, or choosing reading during free time?

The following list will provide you with some possible sources of information to help you assess the effect tutoring has had in your classroom:

- Interview learners
- Review textbook testing materials
- Observe learners and note changes in behavior
- Standardized testing
- Talk to the tutor
- Talk to parents
- Make up a test or use workbook pages

Conclusion

Peer tutoring has been shown to improve student performance for the tutor and the learner in a number of important areas such as self-esteem, academics, and motivation. In the multigrade classroom, tutoring has a history of extending the teachers' instructional influence. However, tutoring often appears to be a rather spontaneous, informal activity.

Information presented by multigrade conference participants indicates both purpose and structure. Because there are so many time demands placed on multigrade teachers, it is critically important to remember to keep it simple and collect only what you need in order to make decisions regarding program change.

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Available from: ERIC Clearinghouse on Educational Management
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Eugene, OR 97403-5207

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